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Table 1

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	1	T TT T	
	<u> </u>)	

	Post- Foam	Post-Foam	Post- Foam Post-Foam Post Foam Post Foam II Neat	Post Foam	II Neat	Untreated
Baseline	1.95	1.9	2.03	1.98	1.85	1.9
	0.35	0.1	0.23	0.63	80.0	1.8
2	0.43	0.23				1.8
4	0.65	0.33			0.28	I
9	0.73	0.5		•		1.83
∞	0.78	0.5		1.33		1.88
24	1.63	1.6	1.58	1.8	1.45	1.8



Table 2

GG HH II A

	Post- Foam	Post-Foam	ost- Foam Post-Foam Post Foam Post Foam II Neat	Post Foam		Untreated
Baseline	90.1	92.14	87.05	86.44	.18	91.32
1	76.81			62.03	85.5	83.11
2	79.38	85.46		61.26	80.34	
4	76.08		3	59.78	86.05	
9	75.59			61.15	83	
∞	77.64		}	60.62	3	85.02
24	79.77	83.97	86.79	73.72	79.75	82.65

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Table 3 GG HH II

	Post- Foam	Post-Foam	ost- Foam Post-Foam Post Foam Post Foam III Neat	Post Foam		Untreated
Baseline	52.35	52.38	52.2	51.67	54.4	53.62
1	54.24		54.17	51.5	54.61	53.33
2	54.68	54.27	54.4	52.73	55.51	53.41
4	55.57	56.03	54.82	23.67	56.56	53.96
9	56.54	56.14		. 54.26	57.59	
8	54.35	55.17	55.58	53.34		53.87
24	51.99	51.7	52.2	50.75	53	52.21

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Table 4 Lamellar Formulations

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INCI name						, wt	(%)	TC	170	0		
	AA	ВВ	CC	DD	EE	FF	GG	нн	11	IJ	KK	LL
alkyl polyglucoside sodium	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
lauroamphoacetate	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0
sodium laureth sulfate Cocoamidopropyl	5.0	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	11.0	13.0	12.4
betaine	5.0	5.7	5.7	5.7	5.7	0.0	5.7	5.7	5.7	6.0	5.0	5.7
Cocamide MEA	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.5	2.0	2.3
citric acid	0.0	0.0	0.2	0.2	0.0	0.6	0.0	0.2	0.0	0.0	0.0	0.0
lauric acid	2.7	0.0	2.3	0.0	3.8	2.7	2.3	2.3	2.3	3.3	3.8	3.7
isostearic acid	0.0	5.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
oleic acid PEG-30	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
dipolyhydroxystearate Guar hydroxypropyl	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.0
trimonium chloride	0.5	0.6	0.6	0.6	0.2	0.7	0.7	0.2	0.7	0.0	0.0	0.5
polyquaternium-10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
polyquaternium-7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
isopropyl palmitate	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	1.5	1.5	2.0
sunflower seed oil	16.0	16.0	0.0	7.0	16.0	21.3	21.3	16.0	21.3	16.0	17.0	14.0
petrolatum	5.0	3.7	5.0	0.0	3.7	3.7	3.7	3.7	3.7	5.0	4.0	3.3
lanolin alcohol	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.8	0.0	0.0
dimethicone	0.0	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
castor oil	0.0	0.0	0.0	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
glycerin	1.0	5.7	1.0	1.0	5.7	5.7	5.7	5.7	5.7	2.0	6.0	1.0
fragrance	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.3
dyes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
preservative	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
DI water	to 100	to 100	to _: 100	to 100	to 100	to 100	to 100	to 100	to 100	to 100	to 100	to 100

All were prepared as follows:

All lipophilic ingredients, lamellar structurants, cocamide MEA, and lamellar stabilizer (if using) were mixed at 150-180°F, setting aside 5-7% of the triglyceride oil or mineral oil. At this point the heating is turned off. This was followed by the addition of the glycerin, then about 1/3 of the remaining water, then the anionic surfactants, the amphoteric/zwitterionics, then the rest of the water. Isopropyl palmitate is added next, followed by the addition of a slurry made of the cationic polymer with the reserved oil. Once the mixture reaches 120°F, the preservatives are added, and once it cools to 100°F, the dyes (if using) and fragrance are added.

<u>Table 5</u> Isotropic Formulations

INCI Name	Ī								w	۱%								
	A	В	C	D	E	F	G	i H	l I	; J	K	L	M	N	P	1 0	R	S
Sodium Laureth Sulfate	12.5	9.3	13.7	12.5	11.07	12.5	13.7	9.3	12.5	9.3	12.5	12.5	13.7	12.5	10	9.3	12	9.3
Cocamidopropyl betaine	5	2.5	0.8	3	4.43	3	3.3		3	2.5	3	5	3.3	3	 -	+	4.5	
Sodium Cocoyl Isethionate		5				 	1	5	1	5		 -		 	5	5	 	5
Sodium Lauryl Sulfate	1	1		1		1		i i	 	 	†	 	 	 	 -	 	 	 -
Cocamide-MEA	1	1.2	0.5	1 1	1	1	0.5	 	1	1.2	0.5		0.5	0.5	 	 	 	1.2
Cocamide DEA		1		1		1	 -	†		 - : - -	T		0.5	1-0.5	 	1.2	 	1.2
PEG-150 Distearate			0.25	0.5	0.5	0.5	1	<u> </u>	0.5	1	0.25	 	 	0.25	 	1	 	 -
Potassium Cocoate				1			ļ	2.5				 	 	0.23	4	 	 	
Hydroxypropyltrimonium	1			T		1	1	 	 	 	 	 	 	 	 -	+	 	
chloride	0.15		0.2	0.25	0.25	0.25	0.25		0.25	Ì	0.2		0.25	0.2				!
Hydroxypropyl guar		1		1			 	1	1	 	 		0.25	0.2	 -	 	 	
Hydroxypropyltrimonium						1		1	ļ							}	1	
chloride		0.4	i	!		İ	İ	0.4	į	0.4			l	1	0.4	0.4	0.2	0.4
Cocamidopropyl betaine		1		1		 			 		 		 	 	0.4		0.2	V.7
and Glyceryl Monolaurate		1	6.6					ļ		ļ	i]	1	ì		6.6	1	6.6
Glyceryl Monolaurate		1.5		<u> </u>	 	 	 	1.65		1.5	 	 	 	 	1.65	0.0	1	0.0
PEG-120 Methyl Glucose	1				 	 	 	1-11-		1	 		 		1.05	 	 '	
Dioleate	1.32		1	-	1.32	1	1 1	İ		İ	1	1.32	Ì				ļ	1 1
PEG-120 Methyl Glucose	 	†	 	 		 	<u> </u>	 	†	 	 	1.32	 	 		 		
Trioleate		ĺ	ļ	0.75	1	!					l	ļ		İ		1	1	
PEG-150 Pentaerythrityl	 	 	 -	0.75		 	 	 	 	 	 	 	 	 	 	i — —	 	
tetrastearate		1	1	j			1		1		0.5			İ		1	1	
Glyceryl Palmate + PEG-7	 	.	-	<u> </u>	 	 -	 	 -	 	 	- 0.5	 			 -	 -	ļ	
Glyceryl cocate	ł					i	İ	1	1				1	2		1.	ľ	!
Acrylates Copolymer		 	 			0.5		i	 		 					ļ		 -
	1	 -			 	 0.5	 	 		 -	 -	 		 		 	 	
Sodium Cocoyl Glutamate	1	0.8			ł		ļ						١.	!		ļ]	
Stearic Acid		0.8		 -	 -	 	<u> </u>	0.8	ļ	0.8			1		2	0.8		0.8
Hydrolyzed Wheat Protein	 	 -	0.23		0.23			 	0.23	ļ				ļ.,		ļ	<u> </u>	
Isopropyl Palmitate	1.5	 	1.5	1.5	1.5	1.5	1.5	-	1.5		0.23		<u></u>	0.23	ļ			
PEG-40 Hydrogenated	1.3	-	1.3	1.3	1.3	1.3	1.3	 	1.3	ļ	1.5	1.5	1.5	1.5	ļ	<u> </u>		
Castor Oil	0.5	Ì	0.5	0.5	0.5	0.5	0.0						١			1	1	
Propylene Glycol	0.5	 	0.5	1 0.3	0.5	0.3	0.5	0.5	0.5		0.5	0.5	0.5	0.5	ļ	Ĺ	ļ	
Glycerin		 	0.3	0.5	0.5	0.5	ļ	0.5		<u> </u>	0.5			0.5	0.5	0.5	0.5	0.5
Fragrance	0.9	0.9	0.9	0.9	0.5	0.5	0.9	0.9	0.5		0.5			0.5	<u> </u>	<u> </u>	L	
Color	0.0006	0.0006	0.0006	0.0006	0.0006				0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Preservative	0.0003	0.0003				0.0006	0.0006	0.0006	0.0006	0.0006	0.0006		0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
Citric Acid	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
Water			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Tr alci	to 100	to 100	to 100	to 100	to 100	to 100	to 100	to 100	to 100	to 100	to 100	to 100	to 100	to 100	to 100	10 100	to 100	to 100
Viscosity	688	9038	25000+	835	63400	2677	9840	393	344	24460	221	197	0	442	197	47800	77020	25000+
Mix with Heptane?	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO.	YES
Viscosity after 6% Heptane						i					· · · · ·		1.25	123	123	1	1-170	123
addition	7785	123	5108	5157	1	25000+	25000+	0	147	835	2357	8854	196	418	0	295		712
Process	6	8	9	6	3	7	2	12	1	8	10	4	2	5	12	8	11	8

Please see page 33 of the specification

<u>Table 7</u> Processes used to formulate isotropic samples in table 5

Process 1	Process 2	Process 3
Add initial water charge and	Add initial water charge and	Add initial water charge and
heat to 150F-160F	heat to 150F-160F	heat to 150F-160F
Premix cationic polymer with		Premix cationic polymer with
glycerin and add to main		glycerin and add to main
batch	Add anionic surfactant	batch
Mix 15 minutes	Add amphoteric surfactant	Mix 15 minutes
	Premix cationic polymer with	
	Isopropyl Palmitate and add	
Add anionic surfactant	to main batch	Add anionic surfactant
Add amphoteric surfactant	Mix 15 minutes	Add amphoteric surfactant
Add other ingredients such	Add other ingredients such	Add other ingredients such
as PEG-150 Distearate,	as PEG-150 Distearate,	as PEG-150 Distearate,
Cocamide-MEA, Hydrolyzed	Cocamide-MEA, Hydrolyzed	Cocamide-MEA, Hydrolyzed
Wheat Protein, Glycerin, or	Wheat Protein, Glycerin, or	Wheat Protein, Glycerin, or
Isopropyl Palmitate	Isopropyl Palmitate	Isopropyl Palmitate
Maintain heat and mix for 30	Add PEG-120 Methyl	Add PEG-120 Methyl
minutes	Glucose Dioleate	Glucose Dioleate
	Maintain heat and mix for 30	Maintain heat and mix for 30
Begin to cool to 95F	minutes	minutes
Premix Fragrance, PEG-40		
Hydrogenated Castor Oil,		·
and Isopropyl Palmitate and		
add to main batch at 110F	Begin to cool to 95F	Begin to cool to 95F
	Premix Fragrance and PEG-	Premix Fragrance and PEG-
	40 Hydrogenated Castor Oil	40 Hydrogenated Castor Oil
Min for Aff and	and add to main batch at	and add to main batch at
Mix for 15 minutes	110F	110F
Add proper attract	Add preservatives, color,	
Add preservatives, color, and		Add preservatives, color, and
promotionals		promotionals below 110F
Add citric acid to adjust pH to		Add citric acid to adjust pH to
		a target range of 5.5-6.0
		Mix for 15 minutes and
measure final viscosity	measure final viscosity	measure final viscosity

Process 4	Process 5	Process 6
Add initial water charge	Add initial water charge and	Add initial water charge and
and heat to 150F-160F	heat to 150F-160F	heat to 150F-160F
	Premix cationic polymer with	Premix cationic polymer with
	Propylene glycol and add to	Isopropyl Palmitate and add
Add anionic surfactant	main batch	to main batch
		·
Add amphoteric surfactant	Mix 15 minutes	Mix 15 minutes
Add Isopropyl Palmitate	Add amphoteric surfactant	Add anionic surfactant
Mix 15 minutes	Add anionic surfactant	Add amphoteric surfactant
	Add other ingredients such	
	as PEG-150 Distearate,	
	Cocamide-MEA, Hydrolyzed	2
Add PEG-120 Methyl	Wheat Protein, Glycerin, or	Add PEG-120 Methyl
Glucose Dioleate	Isopropyl Palmitate	Glucose Dioleate
	Add Glyceryl Laurate or	
Maintain heat and mix for	other low molecular weight	Maintain heat and mix for 30
30 minutes	polymer	minutes
	Maintain heat and mix for 30	
Begin to cool to 95F	minutes	Begin to cool to 95F
Premix Fragrance and		Premix Fragrance and PEG-
PEG-40 Hydrogenated		40 Hydrogenated Castor Oil
Castor Oil and add to main		and add to main batch at
batch at 110F	Begin to cool to 95F	110F
	Premix Fragrance and PEG-	
Add preservatives, color,	40 Hydrogenated Castor Oil	
and promotionals below	and add to main batch at	Add preservatives, color, and
110F	110F	promotionals below 110F
	Add preservatives, color,	
	and promotionals below	Add citric acid to adjust pH to
	110F	a target range of 5.5-6.0
Mix for 15 minutes and	Add citric acid to adjust pH	Mix for 15 minutes and
measure final viscosity	to a target range of 6.0-6.5	measure final viscosity
	Mix for 15 minutes and	
	measure final viscosity	

.

Process 7	Process 8	Process 9
Add initial water charge and	Add initial water charge and	Add initial water charge an
heat to 150F-160F	heat to 150F-160F	heat to 150F-160F
		Premix cationic polymer wi
		Propylene glycol and add t
Add Acrylates Copolymer	Add first anionic surfactant	main batch
	Add second anionic	
Add anionic surfactant	surfactant	Mix 15 minutes
Add amphoteric surfactant	Add amphoteric surfactant	Add amphoteric surfactant
Premix cationic polymer with		
Isopropyl Palmitate and add		Add low molecular weight
to main batch	Add cationic polymer	polymer
	Add Glyceryl Laurate or other low molecular weight	
Mix 15 minutes	polymer	Add anionic surfactant
Add other ingredients such as PEG-150 Distearate, Glycerin, and Cocamide-MEA	Add Sodium Cocoyl Glutamate	Add other ingredients such PEG-150 Distearate, Cocamide-MEA, Hydrolyze Wheat Protein, Glycerin, or Isopropyl Palmitate
Maintain heat and mix for 30	,	Add PEG-120 Methyl
minutes	Add Cocamide-MEA	Glucose Dioleate
Begin to cool to 95F	Begin to cool to 95F	Maintain heat and mix for 3 minutes
Premix Fragrance and PEG- 40 Hydrogenated Castor Oil and add to main batch at 110F	Add preservatives, color, fragrance, and promotionals below 110F	Begin to cool to 95F
Add preservatives, color, and promotionals below 110F	Add citric acid to adjust pH to a target of 6.4	Premix Fragrance and PEC 40 Hydrogenated Castor O and add to main batch at 110F
	3	
Add citric acid to adjust pH to	Mix for 15 minutes and	Add preservatives, color, a
a target range of 5.5-6.0	measure final viscosity	promotionals below 110F
Mix for 15 minutes and		Add citric acid to adjust pH
measure final viscosity		a target range of 5.5-6.0
The state of the s		Mix for 15 minutes and
		measure final viscosity
		measure mial viscusity

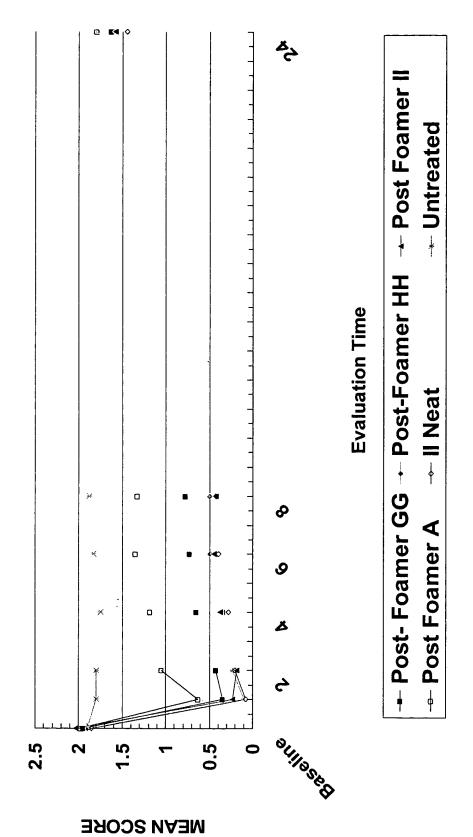
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Process 10	Process 11	Process 12
Add initial water charge	Add initial water charge and	Add initial water charge and
and heat to 150F-160F	heat to 150F-160F	heat to 150F-160F
Premix cationic polymer	Premix cationic polymer with	
with Propylene glycol and	Propylene glycol and add to	
add to main batch	main batch	Add first anionic surfactant
		Add second anionic
Mix 15 minutes	Mix 15 minutes	surfactant
Time to Time to	inix 10 minutes	Surfaciant
Add amphoteric surfactant	Add amphoteric surfactant	Add Potassium Cocoate
	- tas ampriotorio sarractant	Premix cationic polymer wit
Add anionic surfactant	Add anionic surfactant	Propylene glycol and add to
Add other ingredients such		main batch
as PEG-150 Distearate,		
Cocamide-MEA,		
Hydrolyzed Wheat Protein,		
Glycerin, Isopropyl		•
Palmitate, or low	Add second anionic	Add low molecular weight
molecular weight polymer	surfactant	polymer
	Add other ingredients such	
	as PEG-150 Distearate,	
	Cocamide-MEA, Hydrolyzed	
	Wheat Protein, Glycerin,	
	Isopropyl Palmitate, or low	Add Sodium Cocoyl
Add long chain PEG	molecular weight polymer	Glutamate
Maintain heat and mix for	Maintain heat and mix for 30	Cidamate
30 minutes	minutes	Regin to cool to CET
		Begin to cool to 95F
		Add preservatives, color,
Begin to cool to 95F	Rogin to cool to 055	fragrance, and promotionals
Premix Fragrance and	Begin to cool to 95F	below 110F
	A.J	
PEG-40 Hydrogenated	Add preservatives, color,	
Castor Oil and add to main	fragrance, and promotionals	Add citric acid to adjust pH t
batch at 110F	below 110F	a target of 7.3
A .1.1		
Add preservatives, color,		•
and promotionals below	Add citric acid to adjust pH	Mix for 15 minutes and
110F		measure final viscosity
Add citric acid to adjust pH	Mix for 15 minutes and	
o a target range of 6.0-6.5	measure final viscosity	
Mix for 15 minutes and		
measure final viscosity		

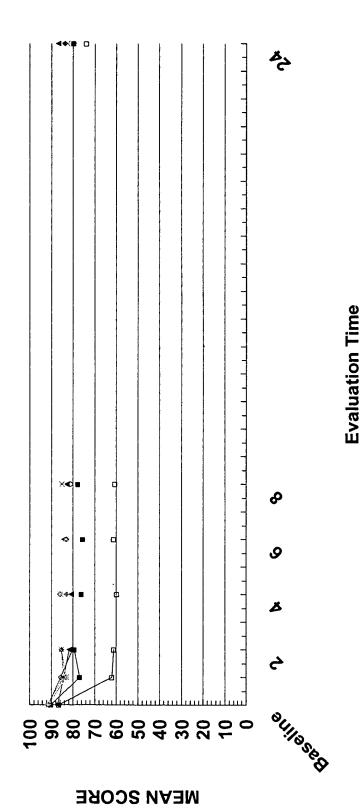


Graph of the mean visual scores for the Fig. 1: Skin Moisturization Study **Dryness Data**





Graph of the average replicate scores for Fig. 2: Skin Moisturization Study the Skicon data



-- Post- Foamer GG -- Post-Foamer HH -- Post Foamer II

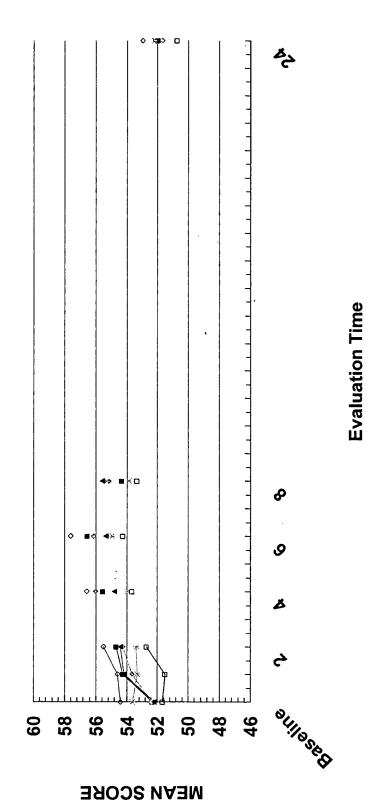
→ II Neat

Post Foamer A

Untreated



Graph of the average replicate scores for Fig. 3: Skin Moisturization Study the Corneometer data



- Post- Foamer GG → Post-Foamer HH → Post Foamer II

→ II Neat

→ Post Foamer A

Untreated

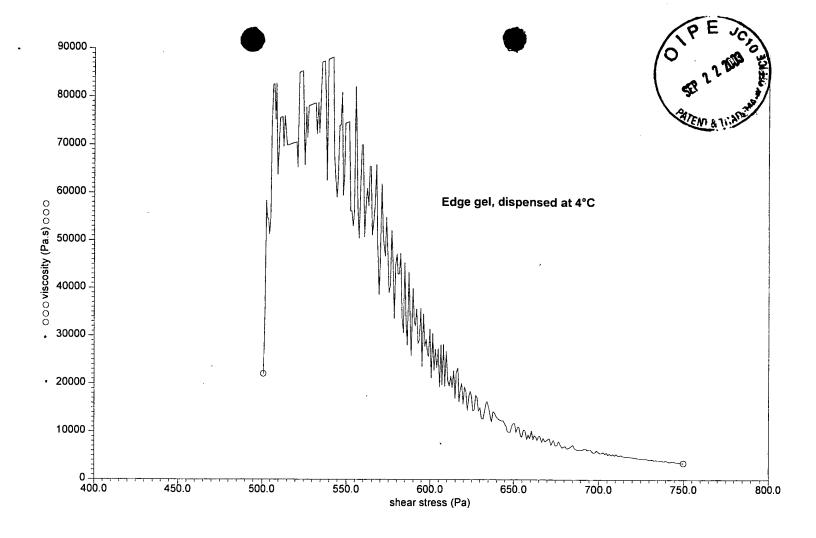
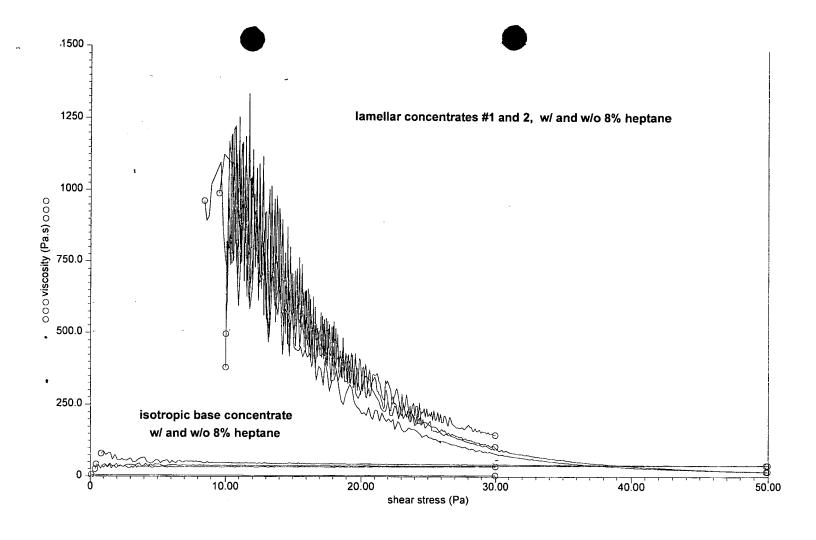


FIG. 4
Viscosity vs. Shear stress for Edge (R) gel





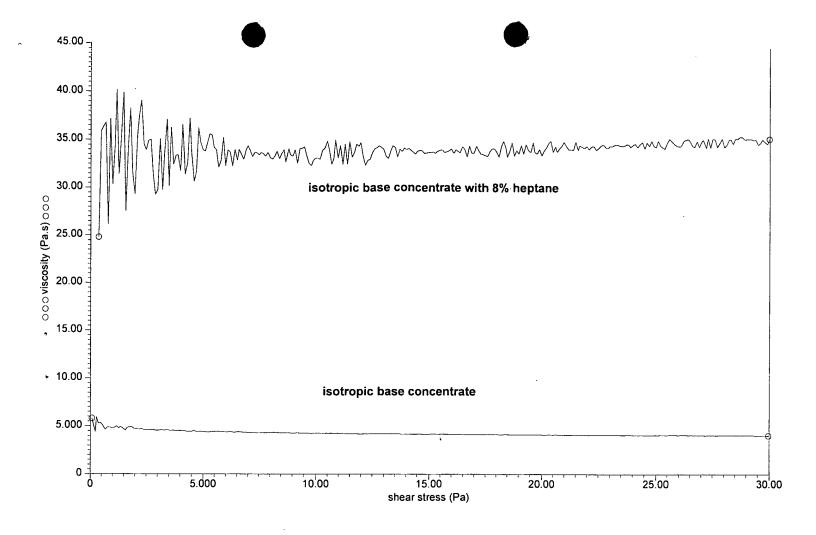


FIG. 6

Expanded version of Fig. 5 showing comparative isotropic lotion base ${\bf A}$ in more detail





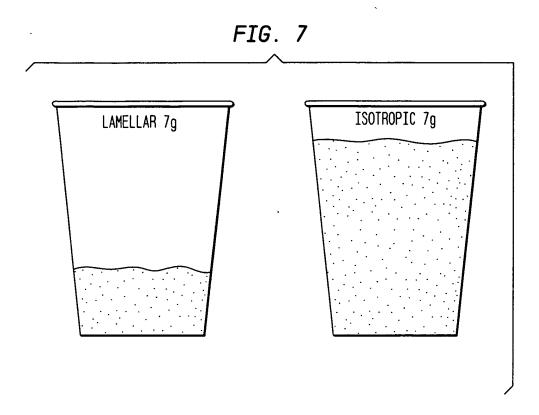


FIG. 7

Foam stability of inventive lamellar post foaming lotion (1) compared to comparative isotropic post foaming gel (2)